

REMARKS

The January 2, 2008 Office Action cited the June 13, 2007 Office Action "for details of the Office Action." In the June 13, 2007 Office Action, the Examiner noted that claims 1-12 were pending in the application; rejected claim 9 under 35 USC § 102(e); and rejected claims 1-8 and 10-12 under 35 USC § 103(a). In rejecting the claims, U.S. Patents 6,751,616 to Chan and 6,058,400 to Slaughter (References A and B, respectively) were cited. Claims 1-12 remain in the case. The rejections are traversed below.

Rejection under 35 USC § 102(e)

in item 4 on pages 2-3 of the June 13, 2007 Office Action, claim 9 was rejected under 35 USC § 102(e) as anticipated by Slaughter. In making this rejection, it was asserted that column 11, lines 41-44 of Slaughter disclosed "metadata client nodes, coupled to said storage area network, to release a lock on virtual metadata when relocation of said at least one metadata server is underway during execution of operations on the virtual metadata" (claim 9, last 3 lines). The cited portion of Slaughter states "[a] distributed lock manager controls access to the locks. When a node obtains access to a write lock, the node marks the write lock as unavailable, performs the desired operation and then releases the write lock."

There is no mention in the portion of Slaughter cited as disclosing the last three lines of claim 9 regarding what happens "when relocation of said at least one metadata server is underway" (claim 9, line 6). No other portion of Slaughter was cited as relevant to what happens "when relocation of said at least one metadata server is underway" and the word "relocation" cannot be found in Slaughter. Therefore, it is submitted that Slaughter is incapable of anticipating claim 9.

In response to the argument in the preceding paragraph, the January 2, 2008 Office Action cited paragraph [0083] of the application under examination as support for interpreting claim 9 as reciting something that is not stated therein, specifically as "apply[ing] equivalently to either relocating a node or failure of a node" (Office Action, page 3 lines 3-4). However, no law or regulation was cited in support of such an interpretation.

It is submitted that the mere use of words in the specification of an application that indicate similar operations are performed during recovery and during relocation when no recovery is taking place, is insufficient reason to add or change words in a claim. If the cited prior art had used interchangeable language, then one of ordinary skill in the art would have been taught that under either condition such operations take place. However, the use of

interchangeable language in the specification merely supports claims directed to operations that occur during both recovery and relocation. It does not permit an Examiner to rewrite a claim to use words that do not appear in the claim. As stated in MPEP § 2111.01, "the words of the claim must be given their plain meaning unless ... the plain meaning is inconsistent with ... the specification." See, *In re Zietz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) and *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004). It is submitted that merely using language that indicates certain operations are performed during both recovery and relocation does not make the statement "when relocation of said at least one metadata server is underway" (claim 9, line 6) inconsistent with the specification due to the failure to also refer to "recovery" or to permit the Examiner to "read into" the claim the word "recovery" from the specification and change the "plain meaning" of the claim.

For the above reasons, withdrawal of the rejection of claim 9 under 35 USC § 102(e) as anticipated by Slaughter is respectfully requested.

On page 3, lines 5-7 of the January 2, 2008 Office Action, the statement "Slaughter teaches the failure of one or more nodes and the transparency of in (sic) providing data to a node in which the node does not know where the data is originated from - col. 32-65" was made with no explanation of why this statement was considered to be relevant to the rejection of the claims. It is not understood why this statement appeared in the January 2, 2008 Office Action and therefore, this statement is not being addressed.

Rejection under 35 USC § 103(a)

In item 6 on pages 3-7 of the June 13, 2007 Office Action, claims 1-8 and 10-12 were rejected under 35 USC § 103(a) as unpatentable over Chan in view of Slaughter.

As discussed in the Response filed October 15, 2007, the June 13, 2007 Office Action cited column 10, lines 10-16 of Chan for the first time in three Office Actions that relied on Chan to reject the claims. Specifically, it was asserted that Chan teaches "each master RLO that was on that node must be transferred to a new master node and installed in a master RLO for that resource on the new node ... [by transferring] information in a series of ... messages" (column 10, lines 12-15). The term "master RLO" might be similar to a metadata server, since "RLO" stands for "Resource Locking Object" (e.g., column 10, line 17) and a "resource has only one master RLO" (column 10, line 16). However, with respect to what happens when a master RLO is removed from a cluster, only column 11, lines 4-11 of Chan was cited by the June 13, 2007 Office Action. According to page 4, lines 16-18 of the Office Action, this portion of Chan

describes "re-mapping, wherein the hash value ranges that are associated with the nodes that have been removed from the cluster are remapped to the nodes that remain in the cluster".

As discussed above, no mention of relocation has been cited or found in Slaughter, contrary to the assertion in the paragraph spanning pages 4 and 5 of the June 13, 2007 Office Action. Thus, one of ordinary skill in the art might learn the following from the combination of Chan and Slaughter: (1) the function of locking resources performed by a master RLO must be transferred to another node if the node on which the master RLO resides is removed from a cluster, (2) the transferring of master RLO functions to another node is performed by a series of messages, and (3) after a node has **performed** a desired operation on a resource, the (write) lock on the resource is released. It is submitted that these teachings in Chan and Slaughter do not suggest "releasing a lock on the virtual metadata when relocation of a required metadata server is underway during execution of the operations on the virtual metadata" (e.g., claim 1, lines 3-4). According to Slaughter, there would be no lock on virtual metadata if the desired operation had been performed and, as discussed repeatedly in response to the continued rejection of the claims based on Chan, all that has been cited or found in Chan that might be relevant to relocation of a metadata server is the use of messages to transfer information.

In response to the arguments in the preceding two paragraphs, on page 3, lines 8-16, the January 2, 2008 Office Action cited the use of the word "if" as a basis for ignoring the limitations recited in claim 1. However, as noted in the October 15, 2007 Response, claim 5 does not use the word "if" but rather recites "releasing a lock on virtual metadata when relocation of the metadata server is underway during execution of operations on the virtual metadata" (claim 5, last 2 lines). The January 2, 2008 Office Action failed to provide any basis for ignoring the limitations recited in claim 5 and therefore, it is submitted that claim 5, as well as claims 6-8 which depend therefrom, patentably distinguish over Chan in view of Slaughter for the reasons set forth above and in the May 24, 2006 Amendment, the November 6, 2006 Request for Reconsideration, the February 5, 2007 Appeal Brief and the October 15, 2007 Response.

On page 3, lines 17-20, the January 2, 2008 Office Action cited column 4, lines 20-39 of Chan as teaching that "if a node leaves the system...the process of removing nodes from the system is referred to herein as 'reconfiguring' the system" and "col. 14, from line 40 and col. 16" as teaching "Open Locks/Resources Table, Remapping, Remastering" in Chan. The portion of Chan cited on page 3, lines 17-20 of the January 2, 2008 Office Action was discussed on page 5 of the Appeal Brief filed February 5, 2007 (received by the U.S. Patent and Trademark Office on February 7, 2007). As noted therein, the previously cited portions of Chan (in columns 5 and 11)

appear to be related to what happens when "a node leaves the system, [and] the system is reconfigured to reflect the current cluster of available active nodes" (column 4, lines 20-21).

However, as also discussed in the Appeal Brief, the only statements that have been found in Chan regarding "releasing a lock on the virtual metadata" (claim 1, line 2) under any circumstances are: "the requester must wait until the database server holding the granted lock releases the granted lock" (column 2, lines 58-60), "[t]he lock manager unit on the master node for the resource controls the allocation and release (or 'de-allocation') of locks for the associated resource" (column 3, lines 32-35), "global resource information ... is used for lock conversion (... changing grants to releases)" (column 9, line 66 to column 10, line 5) and "to reflect the fact that some nodes are terminating... locks granted to the processes on the terminating node(s) ... [are] released to the next lock request in the queue" (column 23, lines 29-33). It is submitted that these statements do not teach or suggest the limitation recited on lines 2-3 of claim 1: "releasing a lock ... when relocation of a required metadata server is underway during execution of the operations on the virtual metadata." The first three statements in Chan regarding release of locks have no relevance to unlocking virtual metadata of a "vnode" during relocation and the last statement refers to "locks granted to the processes on the **terminating** node(s)" not to locks granted to processes on nodes that are not terminating when a metadata server node is being relocated.

Claim 5 recites "releasing a lock on virtual metadata when relocation of the metadata server is underway during execution of operations on the virtual metadata" (claim 5, last 2 lines) and claim 10 now recites "releasing a lock on the virtual metadata when relocation of a required metadata server is underway during execution of the operations on the virtual metadata" (claim 10, last 2 lines). Therefore, it is submitted that claims 1, 5 and 10, as well as claims 2-4, 6-8, 11 and 12 which depend therefrom, patentably distinguish over Chan in view of Slaughter for the reasons set forth above and in the May 24, 2006 Amendment, the November 6, 2006 Request for Reconsideration, the February 5, 2007 Appeal Brief and the October 15, 2007 Response.

Request for Interview

To avoid the interpretation of claim 1 (and claim 10) described in the January 2, 2008 Office Action, the word "if" has been changed to "when" in claims 1 and 10. If this is not sufficient to require the Examiner to give full weight to all of the words in claims 1 and 10, the Examiner is respectfully requested to contact the undersigned by telephone prior to issuing another Office Action to expedite examination of this application by permitting the Applicants to file a Supplemental Amendment containing claims in which all of the words are given patentable

weight. It is noted that this application has received four Office Actions during which the interpretation of the claims has been changed to avoid citing more relevant art or allowing the claims and therefore, the Examiner is respectfully requested to give the Applicants an opportunity to file a Supplemental Amendment to ensure that all words are given patentable weight.

Summary

It is submitted that the references cited in rejecting the claims do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1-12 are in a condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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